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Corruption in Nigeria: An Impediment to Achieving the Millennium Development Goals

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Abstract
This study explores the channels through which corruption acts as an impediment to achieving the Millennium Development Goals (MDGs) in Nigeria. The Structural Vector Auto Regression (SVAR) estimation technique is used to test this relationship. The variables used include Gross Domestic Product (GDP) growth rate, initial GDP (1970), Secondary School Enrollment rate, life expectancy, government expenditure, investment and corruption perception index and inflation and oil exports. The scope covers the period 1970 to 2010. It was discovered that corruption impacted negatively on the achievement of the MDGs in Nigeria. The impulse response results indicate that corruption accounts for negative shocks in the variables, while the Forecast Variance Decomposition show that corruption accounts for a substantial portion of the variance decomposition of the variables under study. Hence, there is need to tackle corruption seriously if the country must achieve its aim in 2015.
Keywords: Corruption, MDGs, Investment, Life Expectancy, Corruption Perception Index

1.0 Introduction

Corruption is a major problem in Nigeria today. World Bank studies states that corruption accounts for up to 12% of the GDP of nations like Nigeria (Nwabuzor, 2005). This paper reviews the fact that Nigeria with a high level of corruption will find it difficult to achieve the MDGs in 2015. This paper is motivated by the observation that Nigeria appears stuck in a vicious circle of widespread corruption and low economic growth. One general policy implication of this paper is that pro poor reform policies such as the Seven Point Agenda, NEEDS II, FSS 2020 are not likely to be achieved if corruption is not tackled. There are several channels through which corruption hinders economic development. They include reduced domestic investment, reduced foreign direct investment, overblown government expenditure, distorted composition of government expenditure away from education, health, and the maintenance of infrastructure, towards less efficient public projects.

Mass poverty, inability to manage sudden upsurge in mineral revenues and adventurous government procurement among public officials are some of the factors that breed corruption. According to Nwabuzor (2005), characteristics of a country that have serious corruption problems are very limited economic freedom and a very weak enforcement of the rule of law. Furthermore, a consensus seems to have emerged that corruption and other aspects of poor governance and weak institutions have substantial, adverse effects on economic growth (Mauro, 2004). People engage in corrupt practices in Nigeria as a result of high level of poverty, high unemployment rate, under-remuneration of workers, financial hardship, persuasion by friends and colleagues in public offices, desire to please kinsmen, late payment of contractors by government, over-concentration of power and resources at the center, unregulated informal economy, nepotism, tribalism in the administration of justice and lack of honest leaders, lack of transparency, inadequate strategic vision and weak monitoring mechanisms Obayelu (2007).

According to the NEEDS draft document (2004) and Obayelu (2007), Corruption manifests in Nigeria in form of abuse of positions and privileges, low levels of transparency and accountability, inflation of contracts, bribery/kickbacks, misappropriation or diversion of funds, under and over-invoicing, false declarations, advance fee fraud, collection of illegal tolls, commodity hoarding, illicit smuggling of drugs and arm, human trafficking, child labour, illegal oil bunkering, illegal mining, tax evasion, foreign exchange malpractices including counterfeiting of currency, theft of intellectual property and piracy, open market abuse, dumping of toxic wastes, and prohibited goods.

In the recent past, it was not possible to measure corruption but now there exist several survey-based measures of "corruption perception as stated in Wei (1998). They include the Business International (BI) Index, International Country Risk Guide (ICRG) Index, Global Competitiveness Report (GCR) Index and the Transparency International (TI) Index. It ranks countries on a one-to-ten scale whereby larger numbers refer to lower corruption. Correlations among these four measures are quite high. As a result, one question that comes to mind is that is corruption an impediments to achieving the development goals in Nigeria? Hence, the objective of this paper is to examine the impact of corruption on achieving the MDGs and look at the direct and indirect effects of corruption on some of the macroeconomics variables.

This paper is organized in the following way. Section 1 discusses the background to corruption in Nigeria and how corruption may be measured as well as evidence as to the economic consequences of corruption, with particular attention to recent empirical research, and with an attempt to interpret them in light of the Nigerian experience. Section 2 reviews the concept of corruption and itemizes the MDGs. Section 3 specifies the model and the econometric methodology to be applied to the data. Section 4 discusses the results obtained. Section 5 provides the conclusions and recommendations

2.0 Literature Review

According to empirical evidence, the economic consequences of corruption are heavy. On investment (domestic and foreign), Mauro (1995) and Wei (1997) found clear evidence that corruption discourages investment and economic growth. Mauro (1995) found that corruption tends to increase the size of public investment and skews the composition of public expenditure away from needed operation and maintenance towards expenditure on new equipment. It also reduces the productivity of public investment and of a country's infrastructure as well as reduces tax revenue. This is evident in the quality of roads, and increased incidence of power outages, telecommunication faults, and water losses. On urban bias, poverty and other consequences, Rose-Ackerman (1999) listed several channels through which poor people are hurt by corruption: lower level of social services, biased infrastructure investment against projects that aid the poor, higher tax or fewer services, disadvantage in selling their agricultural produce and their ability to escape poverty using indigenous, small scale enterprise. Obayelu argues that corruption slows down administrative processes thereby making the implementation of government reforms policies ineffective It is important to note that corruption is a major obstacle in the path of development and it is a vicious circle that must be broken if the MDGs are to be achieved.

According to Eigen (2001) cited in Obayelu (2007) corruption is seen as a "daunting obstacle to sustainable development", a constraint on education, health care and poverty alleviation, and a great impediment to the Millennium Development Goal of reducing by half the number of people living in extreme poverty by 2015. The incidence of poverty in some selected states of Nigeria 2006 according to Obayelu (2007) indicates that the highest incidence of poverty is found in the North while states with the lowest incidence of poverty are in the South. Jigawa has the highest incidence of 95%, while Bayelsa has the lowest at 20.0%.

2.0 Corruption and the Millennium Development Goals

Conceptually, corruption is defined by the World Bank and the IMF as the "the abuse of public office for private gains." Wei (1998) defines corruption as government officials abusing their power to extract/accept bribes from the private sector for personal benefit. Obayelu (2007), defines corruption as efforts to secure wealth or power through illegal means for private gain at public expense.

The MDGs are eight (8) in number and consists of eighteen targets. The goals include:

1. Eradicating extreme poverty and hunger
2. Achieving universal basic education
3. Promoting gender equality and empowering women
4. Reducing child mortality
5. Improving maternal health
6. Combating HIV/ AIDS, malaria and other diseases
7. Ensuring environmental sustainability and
8. Developing a global partnership for development.

In achieving these goals, some of the policies put in place are:

1. Seven Points Agenda
2. NEEDS I
3. NEEDS II
4. FSS 2020.

An appraisal of both past and current efforts to reduce poverty suggests that corruption has been a constant obstacle for countries trying to bring about the political, economic and social changes desired for their development Transparency International (2008). Corruption has been a cause and by-product of poverty. For a country, the results produce a vicious circle of increased corruption, reduced sustainable growth and slower rates of poverty reduction (Transparency International, 2008). According to Transparency International (2008), 'Poverty is a multi-dimensional phenomenon that is characterized by a series of different factors, including access to essential services (health, education, sanitation, etc.), basic civil rights, empowerment and human development'. This forms the basis of the MDGs which is meant to correct the situation.

2.1 Combating Corruption: Where Does Nigeria Government stands?

Nigeria as well as many developing countries remains mired in corruption, crime, poverty, and violence despite the promulgation of several laws like in other countries as the principal mechanism for curbing corruption. As observed by Ijaduola (2008), the fact that Nigeria is a pluralistic society, offers the impression that implementing the MDGS may not be an easy task. The legal instruments used to fight corruption in Nigeria include the Criminal Code, Code of Conduct Bureau, the Recovery of Public Property Act of 1984 and the newly formed commissions (the EFCC and the ICPC). Prior to 1966, the Criminal Code was the primary source of law dealing with corruption in Nigeria. But due to the narrow nature in dealing with corruption such as only criminalizing the conduct of bribe-taking public servants leaving the private, it was replaced by Criminal Justice (Miscellaneous provision) Decree in 1966. This however failed to stem the tide of corruption.

The rules were confusing, thus leaving open the livelihood that guilty persons might escape punishment on technical grounds. The code of Conduct was thereafter formed in the 1979 Nigeria constitution where complaints on corrupt practices are referred to Code of Conduct Bureau Tribunal. The Bureau forbids public officers from simultaneously receiving remuneration of two public offices and from engaging in private practices while in the employment of government, the code bar public servants from accepting gifts or benefits in kind for themselves or any other person on account of anything done or omitted to be done in the discharge of their duties. It prohibits public officers from maintaining or operating foreign bank accounts. Public officers are required to declare their assets and those of their families immediately after taking office, at the end of every four years in office, and at the end of their terms. Due to the non -inclusion of the private sector which are also corrupt in all these laws, In year 2000, the Independent Corrupt Practices and Other related Offences Act was promulgated which eventually gave birth to the ICPC and the EFCC charged with the responsibility of investigating, arresting and charging any offenders with corrupt practices either economic or financial crimes in Nigeria.

3.0 Methodology (MODEL SPECIFICATION AND DATA)

This paper is based on the model used by Barro (1990) and Mauro (1995). Additional variables are added to take into cognizance recent literature. For the purpose of testing the effects of corruption on some of the MDGs, the vector autoregression is used along with the impulse response functions and the variance decomposition. The variables of interest are ordered as follows, GDP growth rate (GDP), corruption (CORPT) measured using the corruption perception index from Transparency International, Secondary School enrollment rate (SCH) from the World Development Indicators (2005), log of total government expenditure (GOV), log of oil exports (OILEX), initial GDP with the period starting from 1970, gross capital formation is used to proxy investment (INV) and the inflation rate (P) all obtainable from the CBN statistical bulletin.

However, the prevalence of corruption can be a by-product of economic growth as well as its cause creates an endogeneity problem and this justifies the use of the autoregression technique. Previous literature is followed to identify variables that are likely to contribute to GDP growth. The initial level of GDP growth in the year 1970 is included to measure the conditional rate of convergence to the steady state growth rate. Secondary school enrolment and life expectancy are employed as indicators of human capital. Higher investment as a share of GDP should lead to higher growth rates. On the one hand, large government expenditure may indicate inefficiencies that crowd out the private sector. Finally, Nigeria's rate of inflation is included as it is said to have a significant effect on growth.

The VAR model is presented below

$$y_t = c + \sum_{i=1}^{n} \phi\, y_{t-i} + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where y_t is (9 x 1) vector of endogenous variables c is the (9 x 1) intercept vector of the VAR, φ_i is the (9 x 9) matrix of autoregressive coefficients, and E_t is the (9 x 1) generalization of a white noise. The VAR system can be transformed into its moving average representation as

$$y_t = \mu + \sum_{i=0}^{\infty} y_i + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Where y_t is the identity matrix while μ is the mean of the process. Equation two is used to obtain the forecast error variance decomposition and the impulse response function. The variance decomposition shows the proportion of the unanticipated change of a variable that is attributed to its own innovations and shocks to the variable in the system.

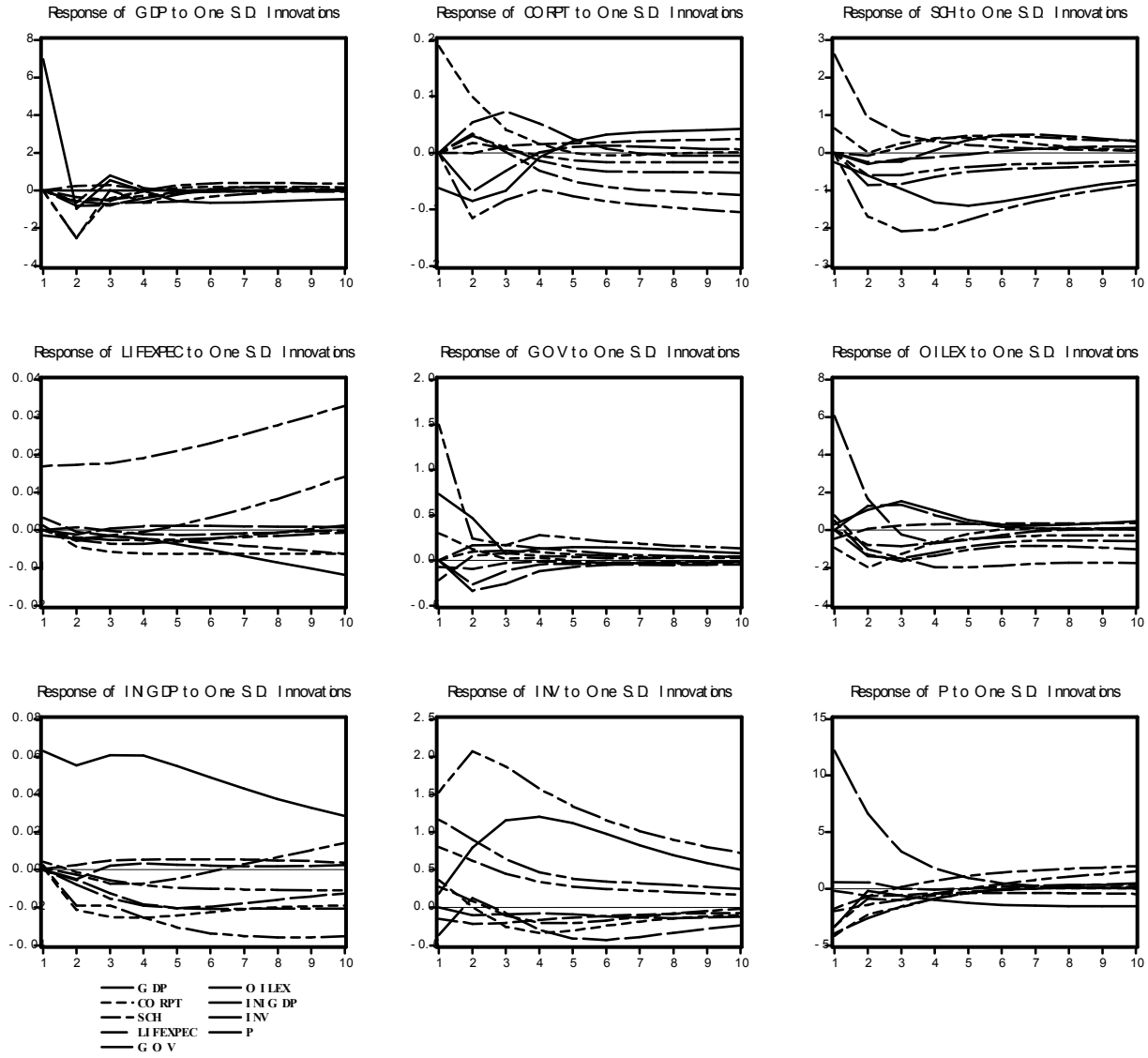
The impulse response functions measure the response of each variable to a shock to itself and other variables.

4.0 EMPIRICAL RESULTS

Vector Autoregression Results

Results obtained from the vector autoregression results indicate that the coefficient of determination R^2 is highest for SCH and INIGDP (approximately 92%), INV (91%), LIFEEXPEC and CORPT (approximately 84%), OILEX (about 65%), GOV, GDP and P (approximately 33%). The difficulty in interpreting vector autoregression results makes it imperative to move straight to interpreting the impulse response functions and the variance decomposition.

Impulse Response Functions



Except for CORPT, LIFEXPEC and INIGDP all the other variables respond to one standard deviation (SD) by converging to equilibrium by the tenth year. This shows that no pro poor policies of the government will be able to solve the problem of corruption in the year 2015. however, all results that converge shows that the

convergence is gradually, which shows that even if policies will work, it will be gradually which may not be achieved at the set target of 2015.

Variance Decomposition Result

Variance Decomposition of GDP:

Period	GDP	CORPT	SCH	LIFEXPEC	GOV	OILEX	INIGDP	INV	P
1	100.0000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	77.51134	9.615090	0.093170	0.179819	9.921150	0.570889	0.486575	1.025694	0.596275
7	72.72218	9.114360	0.206417	1.126712	10.39346	1.945097	0.925732	2.085605	1.480438
9	72.51759	9.009903	0.210070	1.535567	10.26112	2.032987	0.915409	2.056616	1.460736
10	72.41744	8.963929	0.214847	1.724362	10.20970	2.057820	0.911309	2.045751	1.454834

Variance Decomposition of CORPT:

Period	GDP	CORPT	SCH	LIFEXPEC	GOV	OILEX	INIGDP	INV	P
1	9.804220	90.19578	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	13.89105	56.82309	0.000462	1.396881	16.81150	3.645318	0.377276	1.123207	5.931223
7	12.36589	31.63192	0.945654	8.458559	31.11762	7.821054	0.750711	2.807873	4.100723
9	11.58136	25.38932	1.292085	12.05386	35.58011	6.304602	0.908018	3.535317	3.355319
10	11.29074	22.86128	1.445211	13.56303	37.38350	5.688648	0.953798	3.776399	3.037388

Variance Decomposition of SCH:

Period	GDP	CORPT	SCH	LIFEXPEC	GOV	OILEX	INIGDP	INV	P
1	0.851657	5.712025	93.43632	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	3.311983	3.294748	60.98446	0.043490	22.44456	0.510598	2.894542	5.824923	0.690696
7	19.62148	2.325764	19.90609	1.776115	45.21199	1.723648	3.072073	6.003929	0.358901
9	21.11589	2.150030	17.78378	2.121098	45.14607	2.262231	3.040609	5.954854	0.425438
10	21.52022	2.085840	17.17518	2.257678	45.09269	2.389363	3.044980	5.969290	0.464756

Variance Decomposition of LIFEXPEC:

Period	GDP	CORPT	SCH	LIFEXPEC	GOV	OILEX	INIGDP	INV	P
1	0.628098	0.491319	3.724519	95.15606	0.000000	0.000000	0.000000	0.000000	0.000000
2	1.083697	3.461313	1.763309	90.56974	1.194190	0.106492	0.562022	1.027113	0.232122
7	3.034261	6.271067	1.652701	84.68564	1.585482	0.174152	0.954626	1.461269	0.180805
9	4.971226	5.188424	1.968725	81.68982	4.390761	0.114473	0.640666	0.897617	0.138292
10	5.894536	4.638856	2.114277	79.63513	6.271861	0.090225	0.510817	0.727126	0.117177

Variance Decomposition of GOV:

Period	GDP	CORPT	SCH	LIFEXPEC	GOV	OILEX	INIGDP	INV	P
1	18.21843	3.008621	0.184460	1.617991	76.97050	0.000000	0.000000	0.000000	0.000000
2	21.78538	2.985622	0.422219	1.434260	66.97842	2.072335	0.266189	0.788020	3.267550
7	20.83144	2.661744	0.426268	1.506529	63.89210	2.348124	0.892218	2.334859	5.106720
9	20.94980	2.669623	0.436398	1.517969	63.67912	2.425229	0.916159	2.381853	5.023848

10	20.94457	2.673704	0.442534	1.547897	63.62133	2.454673	0.923371	2.398080	4.993849

Variance Decomposition of OILEX:

Period	GDP	CORPT	SCH	LIFEXPEC	GOV	OILEX	INIGDP	INV	P
1	0.235966	2.312847	0.550682	0.648522	1.662073	94.58991	0.000000	0.000000	0.000000
2	2.322479	9.068847	0.407307	3.626501	3.060443	73.82380	1.140271	3.551085	2.999270
7	5.445410	7.367206	0.762538	9.569579	19.56247	42.89245	2.368686	7.540867	4.490792
9	5.184234	6.739481	0.940385	10.30363	23.72232	39.17389	2.324195	7.496581	4.115277
10	5.145628	6.434147	1.025427	10.77213	25.51396	37.39378	2.300239	7.476477	3.938209

Variance Decomposition of INIGDP:

Period	GDP	CORPT	SCH	LIFEXPEC	GOV	OILEX	INIGDP	INV	P
1	99.33628	0.041856	0.004303	0.021929	0.147742	0.001684	0.446209	0.000000	0.000000
2	87.76056	5.708322	0.073371	0.091740	4.649341	0.386305	0.239870	0.777906	0.312589
7	63.68069	9.669645	0.440585	0.439803	13.82691	4.866485	1.246336	5.661349	0.168197
9	58.03350	9.768860	0.465308	0.727261	17.51393	5.079181	1.581305	6.674807	0.155851
10	55.52721	9.850400	0.461807	1.112753	18.97944	5.061399	1.739252	7.110677	0.157069

Variance Decomposition of INV:

Period	GDP	CORPT	SCH	LIFEXPEC	GOV	OILEX	INIGDP	INV	P
1	0.711754	2.775126	0.496349	1.638118	49.29075	2.849603	13.62691	28.61140	0.000000
2	6.052244	1.205614	0.639837	0.779074	60.61894	1.373722	9.406851	19.82979	0.093928
7	21.45756	1.724135	0.622895	0.785484	56.72891	2.584522	5.162242	10.71218	0.222070
9	22.15984	1.682250	0.611988	0.743357	56.28396	2.960915	4.949483	10.28699	0.321212
10	22.28565	1.664850	0.610841	0.723205	56.24004	3.048317	4.891461	10.17749	0.358155

Variance Decomposition of P:

Period	GDP	CORPT	SCH	LIFEXPEC	GOV	OILEX	INIGDP	INV	P
1	5.313702	8.166827	0.014631	1.445758	5.243413	0.159685	1.876889	7.454733	70.32436
2	4.151610	8.267978	0.183098	1.316944	4.366616	0.234130	2.227834	8.323548	70.92824
7	5.929884	8.376513	0.479437	3.185094	4.462860	0.234256	2.386807	8.369924	66.57523
9	7.123734	7.994777	0.574976	5.043833	5.091430	0.288222	2.282211	8.054200	63.54662
10	7.647604	7.776555	0.632316	6.058803	5.638814	0.312387	2.226362	7.894573	61.81259

Ordering: GDP CORPT SCH LIFEXPEC GOV OILEX INIGDP INV P

VARIANCE DECOMPOSITION RESULT

Result from the variance decomposition indicate for GDP that GDP accounts for 100% of itself with no other variables explaining it in the first year. However, in the 2nd year, indicating the period for 2015, and corruption accounts for about 9.6% while in the 10th year it still accounts for about 9% while Government expenditure explains a high percentage of GDP in the 2nd year and 10th year with about 10.4% in the 2nd year and 10.2% in the 10th year. For corruption, the variance decomposition result indicates that corruption account for a high percentage of itself in the first year. In the 2nd year representing 2015, it indicates that it still accounts for a higher percentage of itself follow by government expenditure. A further look to four years period after indicate that government expenditure accounts for a higher percentage of about 37.4% while corruption accounts only about 23% of itself. This result proves that government expenditure is a major variable that encourage corruption practice in the country. This however was not surprising as many capital expenditures of the government are abandoned and the money set aside for them are nowhere to be found. Result from the school

enrollment indicates that in the first year, corruption accounts for about 6% while it reduces to about 2.1% in the 10th year. Looking at the 2nd year, the result indicates that the major variables that accounts for school enrolment is government expenditure explaining it with about 45%. For LIFEXPEC result, it indicates that GDP, corruption and school enrollment accounts for it in the first year, in the 2nd year the result shows that corruption has increased to about 6.3%. this result shows that the level of corruption accounts more in the period of 2015 which may not allow the government to achieve its goals in that period. Results for GOV, OILEX, INGDP, INV and P also indicate clearly that corruption accounts for about 3%, 2.3%, 0.04%, 2.8% and 8.2% in the first year and 2.7%, 7.4%, 9.7%, 1.7% and 7.8% respectively in the 7th year. This proves that the level of corruption will still continue in the year 2015 as the rate continues to rise.

5.0 CONCLUSIONS AND RECOMMENDATIONS

This study on corruption in Nigeria an impediments to achieving MDGs was carried out using a VAR model with the impulse response functions and the variance decomposition. Findings show that corruption reduces life expectancy and economic growth while investment has a positive relationship with corruption. Corruption explains low growth more than growth explains corruption and that Government expenditure has been the leading avenue for the growth of corruption in the country of which all the governments from the top to toe are fully involved.

The paper recommends that efforts be made at increasing the rate of economic growth. Investing in human capital especially those that improve the well being of the people and a strong monitoring of the government expenditure on project from both the local, State and Federal Government can achieve this, when they are done on the basis of need and not for greasing the pockets of a few select people.. Conditions of service especially in the public service and living and economic conditions should be improved also.

There should be less reliance on oil resources, as they have not contributed significantly to growth but have created room for rent seeking and siphoning of the country's revenue.

The big government has provided opportunities for corruption and so they should divest from providing services to being a regulatory body so as to meet with their vision in 2015. Howbeit, this can only be achieved when there is increased accountability, transparency in government and the public – private sectors of the country. If all these are well monitored and put in place, no doubt that the thought of the country for 2015 will be achieved with ease.

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